

Amendments to the Specification

Please amend paragraph [0012] as follows:

[0012] This disclosure relates to a process for distributing audiovisual sequences according to an original stream format having a succession of frames, analyzing the succession of frames of the original stream ~~on which an analysis is made~~, prior to transmission to client equipment, to generate a first modified main stream and complementary information, ~~then separately transmitting~~ the modified main stream and the complementary information ~~are transmitted~~ separately to equipment ~~of~~ at an addressee, at least the modified main stream transmittal through a high throughput network and synthesizing for which a synthesis of a stream in the original format on a synthesis module is calculated on the equipment of ~~at~~ the addressee as a function of the modified main stream and the complementary information, wherein the analysis of analyzing the original stream includes:

[[[-]]] an operation application stage comprising modelings generating data comprising sequences of pseudorandom values with known parameters,

[[[-]]] a stage for the extraction of extracting original data from the original stream as a function of the values of the pseudorandom sequences to produce a modified main stream, and

[[[-]]] storing a stage for storage of the parameters of the modelings data from the operation application and extracting in the complementary information.

Please amend paragraph [0017] as follows:

[0017] The disclosure further relates to a process for distributing audiovisual sequences according to an original stream format having a succession of frames including:

performing modelings on the original stream to generate sequences of pseudorandom values with ~~no~~ known parameters;

extracting original data as a function of pseudorandom sequences;

generating a first modified main stream and complementary information;

storing at least one parameter from the modelings in the complementary information;

separately transmitting the modified main stream and the complementary information to an addressee; and

synthesizing a stream in original format by equipment of the addressee as a function of the modified main stream and the complementary information.

Please amend paragraph [0031] as follows:

[0031] This disclosure also concerns modelings of pseudorandom processes used to define at which location and which modification will be applied, which modelings are a mathematical model describing a random natural phenomenon. These pseudorandom processes are initialized by different grains seeds. The random process generating the grains seeds is also modified dynamically by a set of parameters relative to its modeling during generation of the pseudorandom sequence.

Please amend paragraph [0032] as follows:

[0032] These initialization grains seeds and modeling parameters are advantageously the data extracted from the original stream. The protection applied to the contents distributed by the secure system is advantageously based on the principle of deletion and replacement of certain information present in the encoded original audiovisual signal by any method such as: Substitution, modification, permutation or shifting of the information. This protection is also based on a knowledge of the structure of the digital stream. This solution extracts and permanently preserves in a secure server connected to the broadcasting and transmission network

a part of the data of the audiovisual program recorded at the user's or directly broadcasted in this complementary information, which part is of prime importance for reconstituting the audiovisual program, but has a volume that is very small relative to the total volume of the digital audiovisual program recorded at the user's or received in real time by the user. The lacking part (the complementary information) will be transmitted via the secure network advantageously distributed by broadcasting or transmission at the moment of viewing and/or hearing of the audiovisual program. The data removed in the original audiovisual program is advantageously substituted to form the modified main stream by random or calculated data called decoys.

Please amend paragraph [0052] as follows:

[0052] A pseudorandom process is a deterministic process that allows generation of a sequence of numbers that possesses a distribution selected in a more or less uniform manner. These processes are initialized by a grain seed that serves as a starting point for the sequence. The advantage of pseudorandom processes is that they are rapid (short execution time for a computer) because they are issued from not very complex mathematical calculations. The quality of a pseudorandom generator is measured as a function of its period (number of minimal values that the sequence contains before reproducing itself identically) and the equidistribution that it will supply in several directions. An efficient pseudorandom generator has a long period and an equidistribution in a large number of direct actions.

Please amend paragraph [0053] as follow:

[0053] An example of a pseudorandom generator of numbers (congruent linear pseudorandom generator) is described by the following expression, in which S_n is the term of the sequence, $M-1$ the maximal maximum value for the term S_n , and A and B are respectively the slope and the ordinate at the origin of a straight line F of the equation:

$$S_{n+1} = (S_n * A + B) \bmod(M).$$

The term S_n represents in this case the seed grain maintained as follows:

grain=(grain * 0x5DEECE66DL+0xBL) seed=(seed * 0x5DEECE66DL+0xBL) &

((1L<<48)-1;
S_n=grain seed
A=0x5DEECE66DL
B=0xBL
mod (M)=& ((1L<<48)-1);

Please amend paragraph [0070] as follow:

[0070] The protection process for each of the different digital formats has its own analysis algorithm constituted of the enumerated stages in guaranteeing an audiovisual degradation. Including the pseudorandom processes, the analysis ensures the unicity uniqueness and effectiveness of the protection. It is at this moment of the process that the degree of security introduced into a stream is defined from the possible combinations generated by the pseudorandom process. The pseudorandom sequences generated during the analysis are advantageously used for:

- Selecting the position of data to be extracted,
- Selecting the number of data to be extracted for a given stream portion,
- Selecting the size of the stream portion to be protected,
- Selecting the number of portions to be protected,
- Selecting the decoys and inserting them in place of the original data.

Please amend paragraph [0078] as follows:

[0078] Since an algorithm can not be composed solely of random processes as concerns rapidity of execution, the use of a pseudorandom generator becomes necessary for which generator a random grain seed is used that permits the desired security level to be fixed, e.g., by selecting a grain seed with a length of 128 bits. Likewise, a judicious choice of the parameters A, B, M and S.sub.0 is carried out in such a manner as to generate pseudorandom sequences with different types of distribution.